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ABSTRACT

This document presents an overview of the past, present, and future of vocational training (VT) in the Federal Republic of Germany. The following topics are discussed: place of VT among the various institutions constituting Germany's education system; Germany's dual system of on-the-job and school VT (historical development, training regulations, reorientation in Eastern Germany, legal basis and responsibilities, training place guarantees); apprenticeships (apprenticeable trades, requirements and demand for apprenticeship training, training regulations and technological innovation, employer and trade union roles, Federal Institute of Vocational Training, roles/duties of the chambers of commerce and industry and of employing firms, suitability of instructors, interplant training, training contracts and remuneration, financing of VT, training place supply/demand); VT schools (skeleton curricula, the vocational foundation training year and its school and cooperative forms, full-time VT schools); from profession to school (career information/advice in schools and job centers, training spot searches, examinations); differentiated assistance in VT (talented and less able students); problem groups in VT (disadvantaged and handicapped students, young foreigners, women); further vocational training and retraining (organizations, legal basis); and future development of VT (demand occupations, innovative qualification profiles). (MN)

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EDUCATION AND SCIENCE

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LEARNING FOR THE WORKING WORLD

Vocational Training in the Federal Republic of Germany

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LEARNING FOR THE WORKING WORLD

Vocational training in the Federal Republic of Germany

The acknowledged quality of German products, the irrepressible lustre of "Made in Germany", the persistent competitive power of the German economy worldwide despite relatively high labour costs – all these factors are attributed by observers of German development not least to the high level of qualification and large number of German skilled blue and white-collar workers. Both are the result of vocational training which enjoys an important place in the education system in the Federal Republic of Germany, a country poor in raw materials. "Our brains are our capital" is the guideline for safeguarding our competitive and innovative abilities.

In recent years, worldwide interest in the German vocational system has also increased for other reasons: the relatively low level of unemployment and juvenile delinquency among youth compared internationally, the well organized transition from school to the world of work, the rapid surmounting of new challenges in professions tailored to the latest state of the art are also held in high regard and acknowledged as the result of the special form and scope of German vocational training.

This issue deals with numerous aspects of German vocational training. It intends to show the historical origins of this training, what its structures look like today and the way it is integrated with the education system as a whole. The problems besetting vocational training will also be touched upon.

In this context, special attention must be paid to the new *Bundesländer* (states) in Germany where a radical change – from a planned to a market economy – has taken place.

In the Federal Republic of Germany, the place of work (*Betrieb*) constitutes the central point in vocational training – not the school. True, there are also full-time training programmes at vocational schools (*Berufsschulen*) but they "only" play a supplementary role vis-a-vis the predominant form of occupational training (*Berufsausbildung*) i.e. the "dual system".

Good training is expensive, both for vocational training in schools and for employers. Training depends very much on the quality of facilities and equipment, materials, teaching staff and training aids. What are the costs of vocational training? Who foots the bill? These questions will be answered on the following pages.

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Good trade training, i.e. an apprenticeship, is the basic essential as far as job-security is concerned in the Federal Republic of Germany. Breaking off vocational training prematurely often represents the point of departure for subsequent unemployment.

Consequently, young persons themselves must take an active part in their path from school to occupation. They have manifold opportunities of obtaining advice and are largely free to choose their own profession. Whether they can work in their "dream occupation", however, not only depends on their qualifications, but also on the employment market situation.

Vocational training in the Federal Republic of Germany must open up additional opportunities in life for particularly talented young persons by giving them access to other educational channels. Promotion of talented persons in Germany is just as much a matter of course in vocational training as it is in schools and higher education. The paths followed are described in this number.

The disadvantaged, the handicapped and, to some extent, foreign young persons are the "problem children" of the German education and training system. Even young women often experience great difficulty in finding good trade training, particularly if they restrict themselves to a relatively small number of desired professions. What opportunities are they offered by the vocational training system in the Federal Republic of Germany? Are they given help and, if so, what sort of help?

"Training for all" is an objective which all political parties and social groupings have supported and set themselves. But, as a rule, vocational training only provides the foundation for 30 to 40 years of working life. Further training is its natural and essential continuation, especially in view of the fact that, compared with the rest of Europe, training in Germany takes some considerable time. The correlations between training and further training are coming more and more to the fore in individual, inplant and state planning.

As European cooperation and the dynamic strength of the European single market develop, it is becoming necessary to make German vocational training "fit for Europe". In this context, emphasis is being placed on the expansion of the vocation-related learning of foreign languages, intensification of the cross-border exchange of skilled young persons within the framework of European (LEONARDO), as well bilateral exchange programmes and a purposeful integration of time-limited periods of vocational training abroad with occupational training and continued training at home.

Michael Schlicht

In Germany, trade training is focused on the firm rather than on vocational school.

Good training is an indispensable requirement for a safe job in the Federal Republic of Germany. (Apprentices at Bayer)

VOCATIONAL TRAINING AS AN INTEGRAL PART OF THE EDUCATION SYSTEM

School education: from primary school to university

There is a wealth of various school forms and paths in the Federal Republic of Germany. Despite the basis of a common structure, there are marked differences in the 16 federal states (*Bundeslander*). This stems from the fact that the whole of the education system is the responsibility of the federal states and not the Federal Government. Legislation, organization, administration, finance and curricula planning are the responsibility of the federal states in broad areas – from kindergarten to university.

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Coordination exists between the *Bundeslander* on matters concerning the further development of the education system. The Federal Government is also involved in joint overall educational planning . In one particular sector, however, because of its responsibility for the economy, the Federal Government plays the leading role: in the training of apprentices for a specific trade, which takes place partly on the job and partly in vocational school, i.e. the dual system, the Federal Government provides the legal basis for inplant training.

School attendance is compulsory in the Federal Republic of Germany. It begins on completion of the 6th birthday and ends at the age of 16. This, however, only applies to full-time school. Between the ages of 16 and 18 young persons no longer attending a secondary school must go to part-time schools.

Structures and data

As a rule, the primary level, the *Grundschule*, lasts four years – in some *Bundeslander* six – and provides pupils with basic knowledge in preparation for their attendance of a secondary school:

▶ the *Hauptschule*
(Main School)
This type of school provides education from Classes 5 (7) to 9/10 with a main school final certificate (*Hauptschulabschluß*): in special cases, it can also culminate in an intermediate certificate (*Mittlerer Abschluß*).

▶ the *Realschule*
(Intermediate School)
Covers Classes 5 (7) to 10, culminating in an intermediate certificate (see above).

▶ the *Gymnasium*
(Grammar School)
Goes from Class 5 (7) to Class 12, but as a general rule, to Class 13, culminating in an intermediate certificate (see above) after Class 10 and *Abitur* (university entrance qualification) in Class 12 or 13.

If certain requirements are fulfilled, pupils can move between *Hauptschule*, *Realschule* and *Gymnasium*, i.e. change schools. This permeability within the system also provides "late starters" with the opportunity of moving up to a higher school.

▶ the *Gesamtschule*
(Comprehensive School)
This type of school exists as a normal school facility or a pilot project in the various *Bundesländer*. It combines the three forms of secondary school mentioned above under one roof from Classes 5 (7) to 10, culminating in the intermediate certificate. Transfer to the *Oberstufe* (Classes 11-13 at *Gymnasium*) is possible.

▶ the *Sonderschule*
(Special School)
Pupils with serious learning problems, who cannot keep up at a normal school, attend special (remedial) schools. They have the same curricula, to some extent, but are given additional educational help.

Trends

The numerical proportions at the various types of school have undergone a rapid change in the last few decades. Further changes are also foreseeable in the future.

In view of the developments on the employment market, the proportions have, in part, undergone a drastic shift away from the *Hauptschule* towards the *Realschule* and *Gymnasium*.

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Whereas up to 70% of school leavers had a *Hauptschule* final certificate in the early 1970s, this has now dropped to a nationwide low of 26%. The fact must be taken into account that, because of the enhanced permeability of the various types of school, the trend towards better scholastic qualifications may well be greater than the growing pupil numbers at secondary schools suggest. One result is undoubtedly the continuous trend towards academic training in the Federal Republic even though, in many cases, vocational training would correspond more readily with individual skills and the qualifications demanded on the labour market. This bandwagon effect has alarmed education experts, prompting ideas of re-emphasizing to an even greater extent the intrinsic value of a *Hauptschule* final certificate as the basis for further vocational training.

Vocational training courses

On completion of Class 9 or 10, various forms of occupational training are available, side by side with general education at secondary schools:

▶ The *dual system* of on-the-job training and (part-time) vocational school education provides training courses (apprenticeships) of between 2 to 3.5 years in various sectors (technical, commercial, agricultural etc.), culminating in a practice-related qualification as a skilled blue or white-collar worker. At a figure of 1.63 million, something equivalent to almost 2/3 of an age-group are following occupational courses as trainees or apprentices.

▶ *Berufsfachschulen* (full-time vocational schools) provide courses of one to three years, culminating in a trade qualification which, however, is not usually recognized as a "fully-fledged" skilled-worker qualification on the labour market. As a result, a growing number of pupils are using the facility as preparation for a shorter period of training under the dual system. These schools also offer training courses and final certificates not occurring within the dual system, e.g. social educational and nursing professions.

▶ Further full-time vocational training schools include, for instance: *Berufsaufbauschulen* (continuation vocational training schools), *Fachoberschulen* (senior technical schools) and *Fachschulen* (technical schools). These schools provide continuation courses on the strength of training received within the dual system or on the basis of other types of vocational training in school. They provide the opportunity to extend general education and deepen specialized trade training. The courses culminate in final certificates permitting further scholastic training courses, attendance of a technical school (see above) and even a higher education institution. Many of the various types of vocational school are housed in the same buildings, enabling teachers, classes and facilities to be used in diverse manner.

A comparison of the pupil numbers at full-time vocational school with those in the dual system shows that scholastic forms of training tend to play a subordinate role in the Federal Republic of Germany. This, however, does not exclude their special importance for individual vocational sectors.

Attendance of state schools requires no fees. Even textbooks etc are paid for by the state in the majority of cases.

Access to academic training courses is possible in various ways in the Federal Republic of Germany nowadays. The most common way continues to be via the *Oberstufe* (Classes 11,12 and 13) at a *Gymnasium*. At the end of Class 13, pupils sit their final examination, known as *Abitur* or *Reifeprüfung* which gives them general right of access to a higher education institution.

In 1993, some 35% of a year group, i.e. 18 year olds, obtained a university (*allgemeine Hochschulreife*) or a college (*Fachhochschulreife*) entrance qualification.

The other forms of school and training, though, are by no means "dead-ends". Manifold channels via full-time vocational schools or evening grammar schools (*Abendgymnasium*) and secondary education courses (*Kollegs*) known as the "*Zweiter Bildungsweg*" (Second Chance Education) also provide adults with entrance qualifications for *Fachhochschulen* (colleges for higher professional training) and universities. This, however, is often a tortuous path. Persons completing their trade training within the dual system, for instance, and who are in possession of their *Mittlere Reife*, can acquire an entrance qualification for a higher education institute after one year at a senior technical school (*Fachoberschule*). Over and above this, some of the *Bundesländer* are already offering qualified working persons the opportunity of studying without *Abitur*.

Higher education

Higher education takes place at colleges and universities in the Federal Republic of Germany. It provides the basis for vocational activities calling for the application of academic knowledge and methods, or the ability to engage in artistic creativeness.
We must note the following differences:

▶ **Universities,**
as a rule, provide courses of study in the humanities, law, economics, the cultural sciences, medicine and the natural sciences. The same applies to technical universities and colleges nowadays. Although originally restricted to technology and some of the natural sciences, it is now possible to take arts and cultural subjects, as well as medicine, at these institutions. Academic courses usually last five years. Mention must be made at this point of the colleges of education (*Pädagogische Hochschulen*) which train teachers for various school levels. They have now been integrated with universities. Courses of study last three to four years.

▶ **Integrated universities (*Gesamthochschulen*)**
combine university, teacher training college and *Fachhochschule* under one roof. They offer a system of graduated, interrelated courses and final qualifications but only exist in some of the *Bundesländer*.

▶ **Colleges of Art (*Kunsthochschulen*)** offer courses in the visual arts, design, music, film and television. Access to studies is subject to special entrance examinations and is not dependent on a final secondary school certificate.

▶ **Colleges for Higher Professional Training (*Fachhochschulen*)** provide practice-related, specialized training based on a scientific or artistic foundation, similar to polytechnics. They primarily offer courses in engineering, economics, social welfare, agriculture and design. Studies likewise last three to four years.

The student population came to about 1.9 million in 1993; about 1.4 million of these were registered at universities, 443,000 at *Fachhochschulen* and 30,000 at art colleges. This means that exactly 25% of the 19-26 age group are currently studying in the Federal Republic of Germany. Somewhat problematic is the continued trend towards higher education in Germany in recent years even though, in many cases, vocational training would correspond more readily with individual skills and the qualifications in demand on the labour market.

Diversity in the *Bundesländer*

Apart from the main forms mentioned above, there are further educational courses at all levels and which vary from *Land* to *Land*, particularly in the new *Bundesländer* which are currently in the throes of major development. Special mention must be made of the vocational academies (*Berufsakademien*) in Baden-Württemberg and Berlin. Following three years of partly practical, partly academic training, they lead to a professional qualification and diploma of *Fachhochschule* level. Because of the combined prospects offered by this educational course, the *Berufsakademien* are providing a model for other *Bundesländer*.

THE DUAL SYSTEM – ON-THE-JOB AND SCHOOL VOCATIONAL TRAINING

Historical development

The on-the-job part of the dual system goes back to the medieval craftsmen's guilds. Training in a handicraft at that time took place according to the strict rules set out in the guild statutes and was known as "master apprenticeship" (*Meisterlehre*).

An apprentice, who had to pay for his training under a master craftsman, not only worked in the latter's workshop; he was also taken into his master's family. His training included both the mastery of vocational skills as well as the acquisition and practice of social qualities beyond the basic requirements of his trade. Training was rooted in the principle of demonstrating and copying. There was little or no systematic teaching of theory. As a consequence, the quality of the training depended very much on the master craftsman's attitude, his instructional skill and, of course, his own level of craftsmanship. The apprenticeship was completed in a broad, historically-developed spectrum of handicraft professions. This spectrum still exists to a great extent in the present-day vocational structure. As a general rule, completion of apprenticeship was to be followed by a length of time as a journeyman during which the latter was obliged to work for various master craftsmen. Only those could become master craftsmen who had passed the journeyman's and the master craftsman's examinations and were in a position to take over a master craftsman's business. In this way, a qualitative selection was assured. At the same time, however, it frequently prevented the social advancement of skilled workers who had no access to a master craftsman's business on the strength of family or other ties.

This system was radically changed by the creation of freedom of trade in Germany at the beginning of the 19th century and, consequently, the nullification of the trade-training monopoly enjoyed hitherto by the handicraft professions. The subsequent decline in training led to a return to handicraft's responsibility for training. The independence of the skilled trades – as opposed to other economic sectors such as industry and commerce – has also been retained organizationwise.

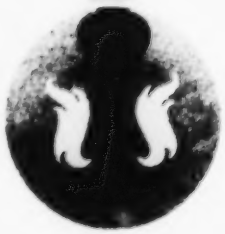
Stonemason

Watchmaker

Chimney sweep

Butcher

Dressmaker


Stove fitter

The handicrafts continue to play an important economic role in Germany.

Positive experiences

The dawn of industrialization in the latter half of the last century increased the demand for well-trained skilled workers. The positive experience gained by industry with skilled persons trained by the crafts prompted the former to take over the basic structures of the latter. Admittedly, training was adapted to industrial requirements. Because of the marked division of labour in industrial jobs, the comprehensive knowledge and skills of one single trade were no longer needed, and thus neither learnt nor taught. If, however, a skilled worker was to remain versatile and, as a result, to have a broadly-based trade qualification in industry, it became necessary to transfer certain parts of the training from the place of work to a "training workshop". This led to a more developed systemization of training in industry and to growing professionalization, i.e. the creation of the post of full-time instructor for larger groups of apprentices.

At the turn of the 20th century, efforts were made, first in industry and then in the crafts, to regularize training in a given profession by laying down a binding catalogue of skills and knowledge – as well as specific duration of training – to achieve a uniform standard of training. Regional differences and those resulting from the varying size and type of firms were to be restricted. This is the origin of the "training regulations" (*Ausbildungsordnungen*) which set out, initially non-commital and then legally binding federal regulations (in 1969), the training objectives and training framework to be adhered to by employers.

Training regulations

The interest by newly growing industries in training comparable to that provided by the handicraft professions resulted in a further important development, apart from the expansion of training volume; newly created industrial sectors and vocational fields adopted the idea of training, created new jobs according to qualification requirements and regularized them in training statutes. In this way, the inplant training system was able to spread throughout the whole of industry and commerce.

Up to the 1920s, however, the vocational training system was still not "dual" because there were no vocational education schools. True, there were night and Sunday schools where apprentices could improve their general education. These schools, however, were not compulsory. It was only with the introduction of compulsory attendance of vocational schools for apprentices that trade training became "dual", was given a further theoretical basis and general education continued. Nowadays, the weekly programme of training is roughly three days on-the-job instruction and two

days vocational school. This is just about the upper limit for the schools. Despite the fact that the necessity for vocational schools is basically recognized, firms prefer to have the apprentices themselves and lay great store by the educational value of practical trade training.

Reorientation in Eastern Germany

The unification of Germany on 3 October 1990 meant the end of a socialist planned economy in Eastern Germany and the adjustment of the vocational training system there to the dual pattern. This required, to some extent, radical reorientation, particularly on the part of those directly involved in trade training. In the ex-GDR, general, vocational and socialist education formed one unit and included compulsory vocational training during the time spent at school. Training took place mainly in the large combines, firms and cooperatives. Small handicraft businesses – which employ over a third of the apprentices in Western Germany – were practically non-existent. There were also considerable structural differences in the roughly identical number of trades. Whereas, in Eastern Germany, the ratio of industrial trades to handicrafts was 40 : 4.3%, in Western Germany 50% of young workers are trained in industry and commerce, and 35% in the crafts. In the state-controlled, planned economy there was only a minimum of trades in some areas, e.g. in the commercial and service sectors, the judicature and the self-employed professions.

Legal basis and responsibilities

Efforts towards standardization and legal fixation of conditions with regard to in-plant vocational training resulted, in the first instance, in the drafting of a parliamentary act (*Reichsgesetz*) in 1919. This took place at the instigation of the trade unions at that time. But it did not result in a law being passed.

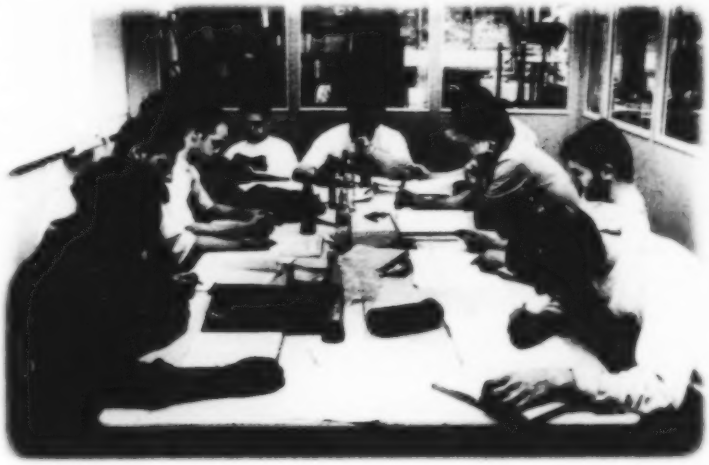
Endeavours to realize statutory regularization were not resumed until the end of World War II. Vocational training in the crafts has been regularized by a special law for this sector, the *Handwerksordnung*, i.e. handicrafts code since 1953. There was renewed discussion in the 1960s on a comprehensive vocational training law which would also apply to other commercial sectors and which, over and above this, contained general principles. This law was eventually approved by a broad parliamentary majority in 1969. The Handicrafts Code was adapted accordingly.

Inter alia, the Vocational Training Act regularizes the articles of apprenticeship between young persons and the training firm (e.g. terms of contract, certificate, remuneration), i.e. the rights and obligations of both apprentice and employer-questions regarding the pattern of vocational training (e.g. suitability of place of training, instructor, training regulations, examination system, supervision of training) and the organization of vocational training (e.g. the duties of the chambers as the "responsible agency" and their "trade training committees"), as well as research in the field of occupational training.

Training place guarantee

There is no statutory obligation on the part of firms to provide training in the Federal Republic of Germany. As a result, public discussion is focused time and again on adequate availability and financing of training places. As one would expect, this political debate intensifies whenever high-birthrate year groups leave school and there is a scarcity of apprenticeships. This is particularly the case at the present time for a further reason. Many parts of the economy in the new *Bundeslaender* (federal states) are in the throes of a transformation process with the result that there are more young persons seeking training than firms are in a position to provide for.

Various political recipes to solve these problems have been put forward. The Social Democrats (SPD) and the trade unions have already recommended the replacement of financing by individual firms with a statutory "training levy" to be paid by all firms. This proposed levy would reimburse the costs incurred by firms providing training.



In the dual system of vocational training, apprentices spend three to four days on the job and one or two days at vocational school. (Training workshop at Opel AG, Bochum)

The coalition government comprising CDU/CSU and the liberal F.D.P., which has been in office since 1982, on the other hand, favours initiatives and training-place pledges on the part of industry and commerce which correspond more readily with firms' own responsibility for young blood. By this means, it has proved possible so far to offer adequate prospects to both high-rate birthgroups and young persons affected by the collapse of the socialist economic system in East Germany. In this context, the fact must not be overlooked, however, that not all firms, which would be in a position to do so, acknowledge this "personal responsibility".

The principle of the unanimous vote

A basic feature of vocational training in Germany is the "principle of the unanimous vote" ("*Konsensprinzip*"). Major stipulations concerning structure and content are only undertaken with the concurrence of the Federal Government, the *Länder*, employers and employees. These groups are all members of the Federal Institute of Vocational Training (see p. 14), thus providing vocational training with a "round table".

Ever since the agreement on German unity was concluded on 3 October 1990, West German vocational training law has been in force in the five new *Bundesländer* (Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia) and the eastern part of Berlin. This has opened up the way for the training of all young persons in Germany in accordance with uniform regulations, the establishment of chambers with supervisory duties and the setting-up of modern in-plant and school training facilities. The skilled-worker qualifications acquired in the ex-GDR have, for the most part, been put on a par with those in the Federal Republic. Instructors in firms and vocational schools can also continue to use their qualifications.

APPRENTICEABLE TRADES – HEART OF THE DUAL SYSTEM

Officially recognized apprenticeable trades

The basis of training in the dual system are the "officially recognized apprenticeship trades" (*Ausbildungsberufe*). Ever since the enactment of the Vocational Training Law, these are training courses regularized by federal ordinances. All officially recognized apprenticeship trades are listed. Young persons under 18 years of age may only be trained in one of these recognized trades. Firms are not obliged to provide training. If they decide to do so, they must act in accordance with the "training regulations" (*Ausbildungsordnungen*) for the recognized skilled trades. The same applies to older apprentices; if they are trained in a recognized trade, the regulations must be observed. Older persons, however, can be trained for other jobs, too.

There are currently 370 recognized skilled trades requiring specialized training. They prepare the ground, however, for some 20,000 different occupations. In other words, training provides differing as well as similar activities.

The training regulations only set out the minimum requirements for any given trade. They regularize

- the designation of the trade
- the length of training
- the job description
- the basic training plan and
- the examination requirements for intermediate and final examinations.

The *designation of the skilled trade* briefly describes the essential content of the training course, e.g. automobile mechanic, chemical laboratory assistant, baker, wholesale and export trade salesman, lawyer's assistant, farmer, restaurant specialist, electronic specialist etc. With a few exceptions in the building industry, all trades also bear the female designation.

The *length of training* for the recognized skilled trades lasts 2 to 3.5 years. Because of the growing demands in the working world, there has been a marked trend towards longer training periods in recent years.

The *job description* gives the key words with regard to the type

The Top Ten Female Occupations

1 Retail saleswoman
2 Doctor's assistant
3 Hairdresser
4 Clerical assistant
5 Dentist's assistant
6 Industrial businesswoman
7 Bank clerk
8 Businesswoman in wholesale and export trade
9 Saleswoman in the food trade
10 Tax and business consultancy assistant

and scope of the qualification which is to be acquired at the end of the training course. Industry and commerce are directly responsible for the content of these training programmes. The chambers, to which all enterprises must belong, define the contents within the meaning of the requirements submitted to them by the member firms.

The *basic training plan* provides firms with a guide as to how the training is to be organized practically and timewise. In other words, it states what is to be learnt in six or twelve months, and in which sequence. On account of the special conditions governing in-plant training, firms are not obliged to adopt a specific method of instruction. The training content is formulated in the shape of learning objectives. The manner in which these are achieved depends on the facilities at the firm's disposal.

The *examination requirements* provide basic information on the subject matter in the intermediate and final examinations. They are closely linked with the learning objectives outlined in the basic training plan.

The Federal Vocational Training Law stipulates that apprenticeships must provide broadly-spanned basic training, qualifying skilled training and the necessary vocational experience in an orderly training course.

Requirement level

Although training for a skilled trade does not require special qualifications before embarking on an apprenticeship, it is assumed, as a matter of principle, that would-be trainees are in possession of a main school final certificate (*Hauptschulabschluß*). Young persons with superior scholastic qualifications and above-average learning progress can, on application (to the chamber), have their training period shortened. Young persons who have successfully completed a vocational foundation training year or full-time vocational school can have this time counted towards the length of training for a recognized skilled trade. This can shorten the period by six to twelve months.

Apart from the federalwide pattern of training, the "recognized skilled trade" has further important functions. Anyone successfully completing the training for a recognized skilled job simultaneously acquires social entitlements (e.g. subsidization for further training and retraining), remuneration rights (entitlement to specific wage scales) and insurance rights (e.g. pension because of disability).

Concentration of demand

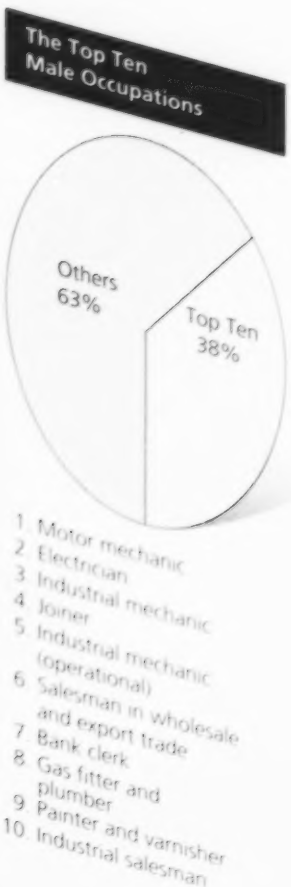
Despite the large number of skilled trades (370), the fact cannot be overlooked that there has been a marked concentration on just a few trades for some years now. The order of succession has changed only marginally in recent years. In spite of manifold efforts to open up all occupations for men and women alike, there is still a distinct division between typically "male" and "female" trades. Compared with the males, the proportion of female apprentices comes to about 40%.

Growing qualification requirements

Just as manufacturing processes and work organization are constantly changing, so are qualification requirements – which are also subject to constant change at one's place of work. Vocational training hoping to successfully prepare persons for their future occupation must, as a consequence, continually re-adapt to technical and economic developments.

If a sector, a professional or trade association feels that certain training regulations are no longer in keeping with the times, a regulation revision procedure is instigated. The responsible minister for the occupation in question is also responsible for the legal side of the revision. In most cases it is the economics minister.

About a third of all apprenticeable trades have been revised since the inauguration of this procedure. The greater majority have also been harmonized with the nationwide standard skeleton curricula for vocational schools in the *Bundesländer*. Thus some 96% of all apprentices – about 1.57 million young persons at the present time – are being trained in up-to-date trades. As a consequence, in future it will not be so much the systematic restructuring of training regulations for a longer period of time which will stand to the fore, but flexible and rapid adapta-



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There are hardly any areas of operational activity in which communication technology does not play an important role today.

tion of selected sectors to the new requirements of working life. In this context, great importance is attached to the inclusion of innovative spheres of work in the statutorily regularized occupations. Sectors of this nature, which are gaining in importance on the employment market, include, for example, tourism, recreational activities, the media, culture, EDP, publicity, environmental conservation and occupational safety.

The trend in the reorganization process is one of reducing the number of skilled trades through a broadening of training, combining related occupations and increasing basic vocational training. By this means, as broad a utilization as possible of qualifications is to be ensured on the labour market.

Training regulations and technological innovation

The headlong developments in information and communication technology are confronting training with a particular challenge. There is scarcely any sphere of operations where the use of data banks and the long-distance transmission of data do not rapidly play a major role. Consequently, the didactic inclusion of key qualifications of this type in scores of training statutes can only be of a medium-term nature. Their short-term incorporation in current apprenticeships is determined by operational requirements in each case. It is in this field, in particular, that the flexibility of practice-related training becomes apparent vis-a-vis vocational school systems.

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Modern and cosmopolitan organization of work

The changes in operational practice with regard to the organization of work not only broaden the spectrum of professional responsibilities; they also lead to decentralized decisions and the cross-linking of work sectors.

New complex professional requirements of this nature are being included in the latest training regulations. Trainees are to be equipped to undertake responsible "independent planning, implementation and control" of the activity in question. Apart from marshalled thought, independently or jointly, mention should also be made of other requirements, such as being able to work in a team and to cooperate, the taking of environmental aspects into account, and the readiness to further train to be able to adapt to new professional work processes in a flexible manner. The organization of content in the dual-training system must, apart from economic, technical and ecological development, give increased consideration to the consequences of European cooperation.

The Federal Republic of Germany enjoys particularly close economic relations with its neighbours. The international orientation of scores of jobs has been given special consideration in the dual-training system. As a result, the so-called "*Euro Qualifications*", such as the mastery of foreign languages and an understanding of the living conditions and historical developments of European neighbours, are of special significance. Important aspects such as these cannot all be taken into account in normal vocational training and belong to the catalogue of aims in continued vocational training. Their importance is emphasized, however, by the bundling of all the European Union's former promotional programmes together in LEONARDO, the new overall programme. By means of practical work experience abroad for apprentices and instructors, information on new learning techniques and the joint tackling of training problems in a foreign-language environment, "European models", in which working together is taken for granted, are being developed and vocational mobility on the European labour market promoted. This also includes the planned introduction of a system at Union level for the recognition of general and occupational skills.

The role of the employers and trade unions

Because of the particular constellation of the dual system account must be taken of two further influential factors – in addition to the Federal Government (which enjoys legislative powers in respect of in-plant training) and the *Bundeslander* (which enjoy legislative powers in respect of vocational schools) in the shape of the two sides of industry, i.e. the employers and the trade unions.

The employers

They determine

- whether they run training courses,
- how many young persons they will train,
- which young persons they will train,
- for which trades they will provide training,
- the requirements of a training profile.

They conclude contracts with the trainees, carry out instructional courses on their own responsibility in line with statutory requirements, and bear the bulk of the costs. They are also legally obliged to offer training places on equal terms to both male and female applicants alike.

The trade unions

On the strength of various statutory regulations, such as the Vocational Training Law and the Law on the Constitution of Enterprises, the trade unions have acquired participation rights in the planning and implementation of vocational training. They enjoy equal representation on the chambers' "Vocational Training Committees", which concern themselves with vocational training matters at regional level and on the chambers' "Examination Committees". At *Land* level, they also enjoy equal representation on the "Land Committees for Vocational Training", together with representatives of the employers and the public sector. These committees advise the *Land* governments on vocational training matters. At federal level the trade unions likewise enjoy equal representation in major decision-making bodies at the Federal Institute of Vocational Training.

This position enjoyed by the trade unions results not least from

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Dual system – Facts and Figures	
Number of apprentices in 1994	1,626 million
Number of new indentures in 1994	567,800
Proportion of year group	70% [1]
Proportion of female trainees	40%
Proportion of young foreigners	7,8%
Number of training firms	500,000
Number of vocational training schools	2,000
Number of out-plant training centres	600
Number of apprenticeable occupations	370
Average training remuneration per month (1994)	DM 1,002 [1]
Number of trainee drop-outs per year (50% of them embark on new training)	140,000
Length of training	2 to 3 1/2 years
Vocational final examinations in 1994	575,000
Proportion of vocationally trained, gainfully-employed persons in the workforce	85%
Net costs of on-the-job vocational training (annually)	DM 26 billion
Costs of vocational training schools	DM 9 billion

1) figures refer to West Germany; in East Germany the figures deviate greatly in some cases because of the structural change

the fact that they regard the representation of employees' interests as a fundamental responsibility in vocational training and its improvement. Despite all criticism, they support the "dual system" of training.

The Federal Institute of Vocational Training (BIBB)

The Federal Institute of Vocational Training (BIBB) represents a valuable cooperative mechanism between employers, trade unions, the Federal Government and *Bundeslander* at federal level. The BIBB is responsible for:

- advising the Federal Government on vocational training matters through its main committee,
- carrying out vocational training research,
- the drawing up and publication of a catalogue of officially recognized trades,
- examination and approval of correspondence courses, and the promotion of these courses through research and advice, in accordance with Federal Government instructions, participating
- in the drawing up of training regulations and other ordinances,
- the preparation of the Vocational Training Report,
- completion of federal training statistics
- the promotion of pilot schemes
- international cooperation
- support in the planning, setting up and further development of interplant vocational training centres.

If one bears in mind the fact that West European states are growing together and that radical changes from a planned to a market economy are taking place in Eastern and Central Europe – in which vocational training plays a crucial part – the support of the Federal Institute is in demand in many respects: it carries out research projects, prepares teaching and learning materials, assists the qualification processes of training personnel and provides advice on the setting up of modern training centres. The BIBB is the responsible agency in Germany for the coordination of various European promotional programmes, including LEONARDO.

The Federal Institute of Vocational Training is a public institution and is under the supervisory control of the Federal Minister of Education, Science, Research and Technology. The institute was founded in 1970 as a purely research establishment. In 1976 its responsibilities were expanded to include development, promotion and consultation. The Institute is located in both Berlin and Bonn, employing a staff of about 420 in both cities. It is financed with funds from the Federal Ministry of Education, Science, Research and Technology's budget. Within the framework of its supervision of pilot schemes, the promotion of interplant training centres and the implementation of international government programmes, the BIBB also administers considerable funds from the Federal Ministry of Education, Science, Research and Technology and the European Union.

The main committee is an autonomous organ of the Federal Institute. Its members include representatives of the top employers' and trade union organizations, the *Lander* and the Federal Government.

The role and duties of the chambers

The chambers, which are the "responsible agencies" for vocational training, play an important part in the carrying out and monitoring of instructional trade courses. True, the chambers are, in point of fact, autonomous organizations of regional industry and commerce – which all firms must belong to. Thus, they represent the interests of the economy even though they are, at the same time, also public institutions, subject to the lawful supervision of the responsible *Land* authorities. The most important are the chambers of industry and commerce, amalgamated in the Federation of German Industry and Commerce, and the handicraft chambers. There are also further chambers for other professional categories.

They have to set up "vocational training committees" for their responsibilities in the field of trade training. Representatives of the employers, trade unions and vocational school teachers are on an equal footing on these committees. The vocational training committee decides on the statutory regulations to be issued by the responsible office and must be given a hearing and informed on all major matters relating to vocational training.

The main commitments of the responsible agencies include, among others, the following sectors:

▶ Examination and monitoring of the suitability of firms as training centres and the suitability of the instructors,

▶ Organization of intermediate and final examinations; in this way, the examinations are independent of the firms and of neutral character,

▶ Issuing training regulations, e.g. for the training of disabled persons and for continued vocational training,

▶ Acting as one of the major responsible bodies and organizers in the field of vocational training.

The training firm

The main location of vocational training within the dual system is the employing firm in the Federal Republic of Germany.

A firm intending to provide trade training must fulfil certain requirements:

▶ It may only train persons under 18 years of age for the 370 officially recognized apprenticed trades.

▶ It must have suitable instructors,

▶ It must draw up a concrete training plan in line with the requirements of the training regulations.

▶ It must be recognized by the "responsible agency" (chamber) as a training firm.

More than half a million firms provide vocational training courses in Germany. They exist in all branches of the economy, i.e. in the industrial, the handicraft trades, commerce and banks, in agriculture, the civil service, the liberal professions (doctors, lawyers, chemists etc), and in household management, to name but a few of the more important ones. But not all firms provide trade training. The largest number of training firms are to be found in the handicrafts sector where more than 50% take on apprentices. The second largest number are to be found in industry and commerce.

There are also marked differences in trade training, depending on the size of the firm. Almost 90% of all apprentices, for instance, receive their occupational instruction in relatively small firms with fewer than 50 employees. This means that some major enterprises do not devote themselves to this task. Viewed in terms of training sectors, a good 48% of all apprentices are to be found in (small) industrial enterprises, commerce and banking, whereas 35% of all apprentices qualify in the handicrafts. It is pleasing to note that, according to surveys undertaken, only 13% of apprentices do not obtain regular employment on passing their examination.

Suitability of instructors – an important criterion

One of the important criteria for a firm's qualification to provide trade training programme is the availability of suitable instructors. The master craftsman's examination has long required instructional ability in addition to purely technical skills. Accordingly, all master craftsmen are entitled to train apprentices. Instructors in industry and commerce (and other sectors of the economy) were by no means expected to offer such qualifications as a matter of course. Since the 1972 Instructor Suitability Order, qualification requirements have been extended to more and more economic sectors. Since that time, instructors have been required to sit an examination to provide proof of their aptitude to train apprentices. This examination includes:

▶ basic questions regarding vocational training,

▶ the planning and execution of training programmes for young persons,

▶ "Young persons undergoing training" – and

▶ the legal aspects of vocational training. Instructors are also expected to have personal and vocational experience.

There are an estimated 700,000 full-time and part-time instructors. The status of instructor represents professional advancement for skilled workers.

Interplant training

The training offered by a firm must comply with all training regulations, i.e. it must be comprehensive. In the course of the last few years, however, the wave of increasing technicalization and specialization led to a situation where a growing number of small and medium-sized firms were no longer in a position to provide the full breadth of training required for a particular vocational qualification. Whereas major companies solved this problem at an earlier stage by setting up and extending their own workshops – where now the bulk of trainees' trade training is provided supplementary to the training received at their work place – the financial and organizational potential of small firms does not extend to equipping similar workshops. In order to help remedy this situation, the concept of interplant (*Überbetrieblich*) training was evolved. In essence, this means that various small firms send their apprentices to courses at a central training centre which, as a rule, are run by the chamber or guild. There, they are trained on modern machines, e.g. in metalwork.

It should be pointed out that interplant training is viewed as complementary to on-the-job instruction, and not as an independent training facility or point of departure for "schoolifying" vocational training. Off-the-job instruction of this nature can be laid down in the training regulations themselves as well as at individual training firm level. In the new *Bundeslander*, where many firms are still not in a position to provide adequate training, interplant centres have turned out to be a particularly effective means of safeguarding quality.

Since the high level of investment costs for such training centres cannot be borne by the firms and chambers or guilds alone, the Federal Government and the *Länder* make considerable sums available from the public purse for investment, equipment and modernization purposes.

In addition, interplant training centres are developing beyond their original purpose into continued training centres and the sites of diverse other vocational training measures. They are acquiring additional importance by introducing new technologies in the small and medium-sized business sector.

The interlinked system

Apart from supplementing in-plant training with interplant instruction, the required breadth of training is being achieved by an "interlinked training system". The latter implies the cooperation of various firms in an overall training programme. Such firms agree as to which parts of the training course can be taken on by the various members of the association. The final result is comprehensive training for a skilled trade. Diverse forms of the cooperative system are possible. The salient feature of the interlinked system is that hardly any additional costs are incurred or investments necessary. The advantage vis-a-vis in-plant training centres lies in the fact that the whole of the training takes place in a practice-related manner. Within the framework of restructuring the vocational training system in the new *Bundeslander*, the interlinked training system will also play a major role by providing partnership between experienced training firms in Western Germany and new enterprises in Eastern Germany.

The training contract

The "training agreement" – *Ausbildungsvertrag* – between employer and apprentice constitutes the legal basis for an instructional trade course. By law, the contract must contain the minimum following details:

1 manner, organization, technically and timewise, and objective of the vocational training course,
2 commencement and duration of training,
3 payment and remuneration level.

The training firm is free to decide whether or not it takes a young person onto the payroll on successful completion of trade training. In like manner, young persons cannot be compelled to stay with the training firm beyond the time stipulated in the training contract.

With this contract, an apprentice accepts the obligation to actively participate in his own training and to strive to acquire the skills and knowledge required to achieve the final training objective. The trainee's obligations include the following instructions given him by the instructor during the course of his or her training.

The training commitments of the employing firm are extensive. It must ensure, for instance, that the required knowledge and skills are taught, that the training is carried out according to the schedule, that the proposed training objective can be achieved within the prescribed period and that trainees are given time off to attend vocational school. Apprentices may not be called upon to perform tasks outside their training programme. Employers are also expected to assist in the formation of character and to provide protection against moral and physical hazards.

Training remuneration

All trainees are entitled to commensurate remuneration on the part of the training firm. This is based on the age of the trainee, the year of training, and the skilled trade in question. The remuneration levels are agreed on in most branches of industry and commerce between management and labour.

On-the-job training not only incurs costs: trainees are also productive to a certain extent. Training remuneration represents financial recognition of this productive effort. At the same time, it also constitutes a commensurate contribution to the trainee's livelihood.

In East Germany, training remuneration amounts on average to about 85% of the West German level which, in view of the fact that the economy there was reorganized a mere five years ago, can be regarded as a positive sign. Training remuneration currently averages about DM 1,000 per month for all occupations (Western level). This represents 20 to 40% of a skilled worker's initial wages.

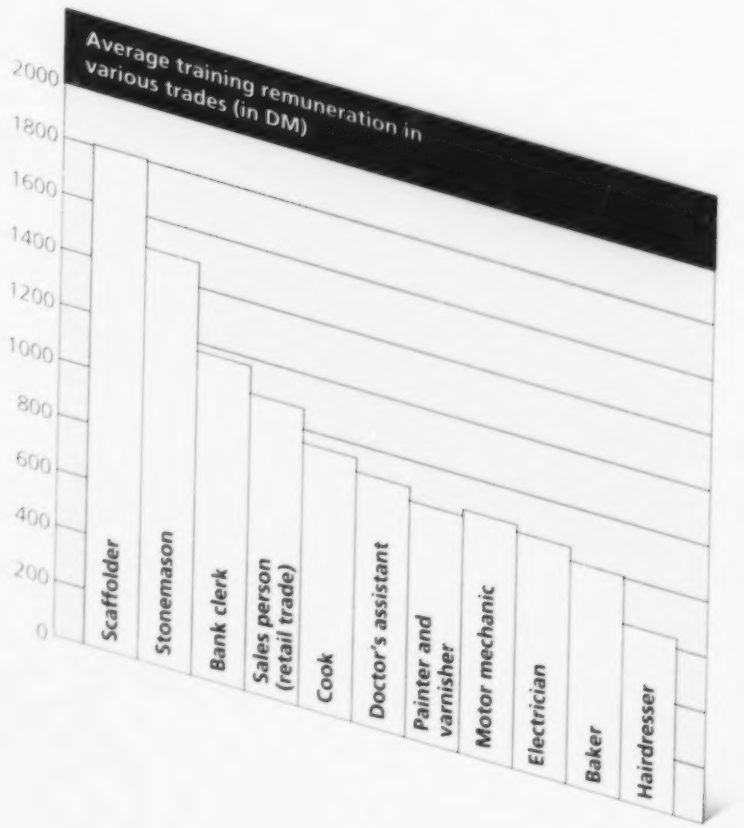
The financing of vocational training

On-the-job training is borne mainly by the individual firms. Scholastic training is financed by public funds (usually those of the *Länder*). The costs of inplant training comprise several factors:

- ▶ trainee costs e.g. training remuneration, social insurance benefits, teaching materials and work clothes,
- ▶ training personnel costs,
- ▶ material expenses.

An extrapolation of the net costs of vocational training, based on a cost survey by the Federal Institute of Vocational Training (BIBB), revealed that the annual costs per trainee average DM 25,000. This is compensated to some extent by production or office work performed by trainees in their final year of apprenticeship. The actual advantages enjoyed by firms result from taking apprentices straight onto the payroll on completion of their training. This saves the costs of recruitment and breaking in skilled workers from outside. The amount of money spent by firms on vocational training has risen quite considerably in recent years. One of the main reasons is the increase in the number of apprentices. But there are also other reasons:

- ▶ more and better trained instructors, plus longer workshop periods,
- ▶ in a number of trades, the former "apprentice's monetary assistance" has grown into respectable training remuneration,
- ▶ increased expenditure on supplementary training, e.g. in interplant training centres, growing contributions for various promotion programmes, particularly in



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favour of slow-learners.

Apart from the financing of vocational training by individual firms, there are also various interplant financial arrangements on the basis of collective agreements. Here, we are referring to the levies to be paid by employers. These levies are paid into funds which are used to cover certain vocational training expenses, mainly in such sectors where individual firms are unable to finance the large share in interplant training on their own. All firms within a specific tariff area are called on to pay a levy, irrespective of whether they run training courses or not. In this way, the levies help to share the load between training and non-training firms.

Training places: supply and demand

For decades, there was no questioning the fact that the number of training places, i.e. apprenticeships, in toto, and in the individual trades, were based on the firms' personal estimate of their own requirements in the way of young skilled workers. This, of course, resulted in marked overlappings, depending on the economic situation and estimated developments. In "good times", a high availability of training places could be reckoned on; in "bad times", on the other hand, it could become quite low. (The extent to which training was provided, what is more, was independent of training policy exigencies.) In the planned economy of the ex-GDR, an attempt was made to solve this problem by the state laying down the economy's "requirement". In this way, education and training paths were controlled in such a manner that every school leaver was guaranteed a training place.

Since 1976, in Western Germany and, following unification, since 1990 in Eastern Germany, the "demand on the part of young persons" has become the yardstick for adequate "availability of places". The basic concept of "training for all" is not questioned by any political constellation in the Federal Republic of Germany.

By means of the annual Vocational Training Report (*Berufsbildungsbericht*) by the Federal Ministry of Education, Science Research and Technology, a "training balance sheet" is drawn up. It is based on data supplied by the job centres (*Arbeitsamter*) where most of the vacant training places in firms and where most young persons who apply for such places are registered. The cut-off date is 30 September each year. Additional data for this annual "training balance sheet" is supplied by the chambers (where all new training contracts have to be registered).

The generally adequate number of training places in the last 10 years, particularly the provision of all young persons in the new *Bundesländer* with a training place – despite considerable economic problems of a structural nature – represents a remarkable and totally unexpected (by many) achievement on the part of industrial training capacity. Conversely, it cannot be denied that the bulk of small handicraft businesses are making considerable efforts with regard to training whilst large parts of major industry are turning their backs on the safeguarding of opportunities for new blood. Because of the restructuring processes in the economy in Eastern Germany, viewed midterm, it is still not possible to provide all young persons with an in-plant training place. This is why off-the-job and school training possibilities are being increasingly

fallen back on.

Many young persons on leaving school do not find a training place directly and, as a result turn to preparatory measures and full-time school training programmes. Those most acutely affected by training place problems are girls, young foreigners and youngsters with learning problems. Diverse measures are being promoted with the aid of substantial funds from the Federal Government and the *Länder* to help these young per-

It was not until the advent of compulsory attendance of vocational school for apprentices that trade training became "dual", was given an increased theoretical basis and also continued general education.

THE VOCATIONAL TRAINING SCHOOL

sons, too, to find a training place. In the dual system of vocational training, the trainee spends three to four days a week on the job and one to two days at vocational school. In order to increase the systematic and theoretical part of basic training, efforts are afoot to make two days a week at vocational school general practice.

In many cases, the time spent at vocational school is lumped together into one or more blocks. The latter are intended to provide larger, interrelated learning units at vocational school and training firm, thus improving the opportunity to learn. The value of this training pattern, however, is something of a controversial issue. Prolonged absence from on-the-job training can result in apprentices forgetting what they have learnt and vice-versa if they stay away from school too long. In many cases, firms do not greet the fact that their apprentices spend too much time away from their place of training.

The almost 2,000 part-time vocational schools in the Federal Republic of Germany have the task, in the main, of teaching the more abstract, theoretical aspects and correlations. By means of demonstration and instruction, they complement and extend practical in-plant training provided by firms and continue trainees general education (in subjects such as German, mathematics, religion, social studies etc). There is an increasing demand to teach foreign languages in vocational schools, too. Depending on the number of young persons in a vocational school district following the same trade course and year, classes known as *Fachklassen*, i.e. classes for related trades, are set up. If, of course, this is not possible, classes are made up of related and unrelated trades. For the minor occupations there are *Land* (state) – or even national – classes. In such cases, trainees can often go to boarding establishments where they receive instruction in their common trade in blocks. In school districts with large industrial concerns, the former often set up special classes for the firms own trainees – provided the numbers justify this in a particular trade.

Skeleton curricula

Coordination between school and firm is one of the major requirements in the dual training system. On the one hand, coordination results from the development of new training statutes. In such cases, parallelism is sought between the training regulations for firms and the skeleton curricula for vocational schools. Close contact between instructors in firms and teachers at vocational schools is also necessary to achieve coordination in isolated trade training cases. At chamber level, there are often joint working groups of instructors and teachers – as well as other coordinating instruments. Such coordination

becomes problematic, however, if a vocational school class consists of trainees from many different types of firms.

Vocational school curricula are set out in accordance with the educational statutes of the *Länder*.

The vocational foundation training year

Discussions have been going on since the 1960s about the possible improvement of the quality of training through a broader foundation. One of the fruits of these deliberations is the vocational foundation training year (*Berufsgrundbildungsjahr/BGJ*). The object of this idea is that training for a particular (skilled) trade should have a broad foundation of knowledge and skills embracing several or more trades. This is linked with the proposed objective that such knowledge and skills acquired in basic training should be variably utilizable or applicable, as the case may be.

"Vocational fields", in which fundamental training was to take place for the trades allocated to them, was created as a basis for the BGJ:

- Economy and Administration
- Metal Technology
- Food and Household Management
- Electrical Engineering
- Structural Engineering
- Wood Engineering
- Textile Engineering and Clothing
- Chemistry, Physics and Biology
- Printing
- Colour Technology and Interior Decoration
- Personal Hygiene
- Health Care
- Nutrition and Home Economy.

A large number of apprenticed trades were allocated to these vocational fields. Thus, the BGJ is basically possible for all these trades. The BGJ exists in two different forms: school and cooperative.

The school form of the BGJ

In the case of the school form of the BGJ, both the theoretical and practical sections of training take place in vocational school in the first year of training. Unlike apprentices in the dual system, the young persons have pupil status.

The school form aims at a continuation of vocational (skilled trade) training in the dual system. Even so, a young person, who has successfully completed the BGJ, can only reckon on being credited with a year – in some trades only six months – towards the whole period of training. To this end, however, the apprenticed trade must belong to a vocational field already learnt. Those successfully completing this course can also catch up on a missed main school certificate (*Hauptschulabschluß*).

The cooperative form of the BGJ

The cooperative vocational foundation training year is based on the principle of duality of training places, typical of the traditional form of vocational instruction. Even so, it accords the school training section (comparatively speaking) the greater part of the training course. The training is usually divided up into two days weekly instruction at vocational school and three days on-the-job training. It can, however, take place in alternative blocks between vocational school and training firm.

The full-time vocational training schools

Full-time vocational schools (*Berufsfachschulen*) prepare persons for a subsequent job or provide vocational training whilst simultaneously furthering general education.Depending on the proposed training objective, the entrance qualification for these schools is a final main school or intermediate school certificate (*Hauptschul-* or *Realschulabschluß*). Depending on the skilled trade and aim, the training course at a full-time vocational school lasts from one to three years. We name here three of the many such training courses: commercial school, *Berufsfachschule* for child care and *Berufsfachschule*

for technical assistants. Courses at full-time vocational schools always conclude with a final examination which, in some subjects, represents the qualification to enter higher education.

Since, however, the final certificates acquired at a *Berufsfachschule* are not accepted in most cases as a full qualification for blue or white collar workers (*Facharbeiter* or *Fachangestellte*) on the employment market, a considerable number of young persons go on to complete a trade training course within the dual system. Here, school attendance counts towards the period of training. The number of females attending *Berufsfachschulen* is particularly conspicuous.

Young persons can check their aptitude for specific trades and receive personal advice at their local job centre

FROM SCHOOL TO PROFESSION

Careers information and advice in schools

At main schools, preparation for the choice of eventual job is given in the pupils last two years in the shape of a subject known as *Arbeitslehre*. Its main aims are:

- to help pupils to appreciate and acquaint themselves with the world of work,
- to provide young persons with a guide to the various vocational fields,
- to help young persons to develop a mature attitude towards their choice of career, i.e. to put them in a position where they can identify and develop their own particular skills and interests.

This preparation for the working world is currently being introduced to secondary schools.

Choice of career and the role of the job centres

On the strength of numerous pamphlets from the Federal Employment Office, young persons have the opportunity to obtain details about various jobs and choose their career. They can also test their personal suitability for specific careers at their local job centres and receive individual advice. Most large cities now boast Careers Information Centres which provide both printed and audio-visual information. These tasks, which were formerly performed exclusively by the state, may now also be undertaken by advisers from the private sector.

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Despite these various possibilities, the final choice of career by young persons is still fraught with considerable problems. After all, such a decision is of vital importance:

- ▶ The recommendations by parents, friends and acquaintances often play a more important role than careers advice.
- ▶ The huge number of trades – who can be expected to know almost 400 – makes a well-founded decision difficult.
- ▶ There is quite possibly no training place available locally in the desired skilled trade – or there is no vacancy.
- ▶ Young persons often assess their personal ability, opportunities and their subsequent profession and chances unrealistically.
- ▶ In many cases, the expectations on the part of training firms in respect of the aptitude and previous school education of young persons and the actual level of achievement do not coincide.

Despite regionally varying difficulties, the constant demand on the part of young persons and the existing availability of training places is leading to a situation where the job centres are able to place almost all young persons or at least recommend them a place. The difficulty of even finding enough new blood is beginning to emerge in many an industrial and commercial sector.

The search for training places

Many firms, particularly large companies, select their trainees according to a special procedure. They have precise ideas on the desired school education and achievement level. In many cases, aptitude tests are held. Final school certificates also play an important role. Apart from this formal procedure, personal impressions and personal contact to firms are of equal importance. Many firms still avail themselves of the opportunity to visit schools in search of potential applicants or hold "Open Days".

"Vocational Information Centres" exist in most large cities in Germany.

Because of the differing economic conditions in the various *Bundeslander*, a number of young persons are confronted with regional problems. In many an area there is a surplus of training places, in others (with a poorer economic structure) insufficient availability. In Germany's new *Bundeslander*, the restructuring of the school and vocational training systems and the collapse of individual major economic sectors will result in considerable imponderabilities for some years to come. As the wishes of young persons do not always coincide with what is offered by employers, too limited an availability also restricts young persons' free choice of career. This can lead to a situation where a young person has to make several applications for a training place or try his luck in another region.

Report book

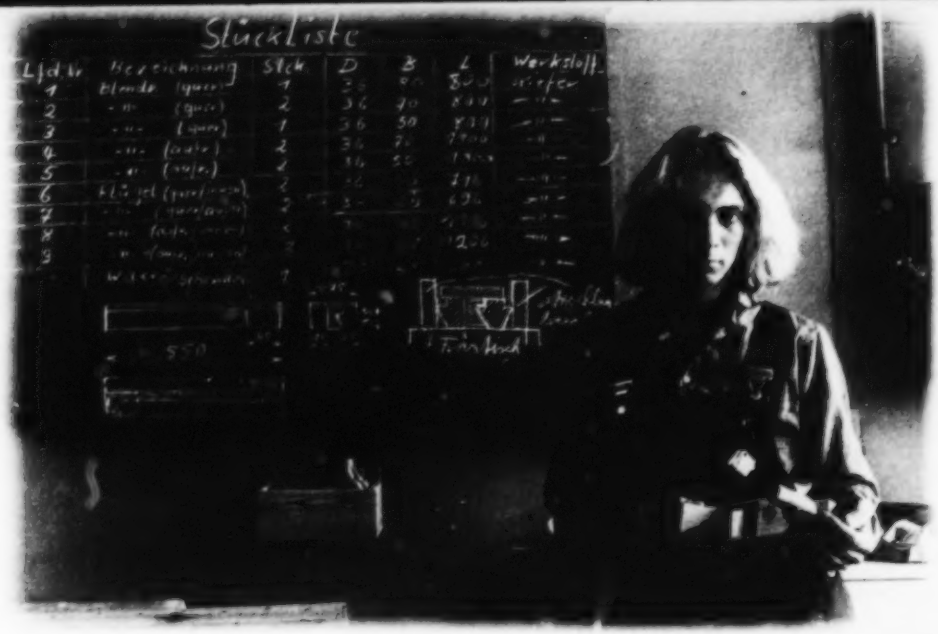
For most of the skilled trade training courses apprentices are expected to complete a "report book" (*Berichtsheft*). As a rule they are expected to fill in briefly details of instructions and work carried out in the training firm and the subjects dealt with at vocational school. In this way the report provides a sort of check for both sides, i.e. apprentice and training firm, on training progress.

Examinations

At least one intermediate examination must take place during training. This provides information on the apprentice's progress and highlights any possible deficiencies or gaps.

The final examination, on the other hand, establishes whether the trainee has acquired the skills and practical and theoretical knowledge required by the regulation and whether the instruction he has received at vocational school has provided him with the basic learning material for his trade training. The examination consists of a theoretical, a practical, a written and, if prescribed by the regulations, an oral section.

Both the interim and final exams are organized and conducted by "examination commit-



Vocational training offers talented young persons additional prospects of access to other educational paths

tees" (chambers). The examination committees are made up of persons delegated by the employers and employees (in equal number), and at least one vocational school teacher. All the committee members are concerned personally with training matters in firms and institutions in the region. Compared with an examination by the training firms, the appointment of examination committees at the chambers has the advantage of greater objectivity and achievement assessment. If a trainee fails his examination, he may repeat it twice. If the trainee passes the examination, he has achieved the objective of his training course; he becomes a *Geselle*, i.e. a journeyman (in the handicrafts), or a *Facharbeiter*, i.e. skilled blue-collar worker, or *Fachangestellter* i.e. skilled white-collar worker. Depending on the apprenticeship trade, 85% to 95% of trainees pass their examination which speaks highly of the sound training provided by firms. The proportion of young persons preferring to follow a course of study rather than vocational training is growing. Consequently, all those concerned are endeavouring to effectively enhance the attractiveness of vocational training vis-a-vis choice of studies. This includes

- additional programmes during apprenticeship and improved opportunities of continued vocational training without a course of studies for talented young persons,
- optimum, individual promotion assistance programmes either for young persons who make no effort to train or those who seem likely to fail.

DIFFERENTIATED ASSISTANCE IN VOCATIONAL TRAINING

Talented young persons

An industrial country wishing to safeguard its high standard of quality needs skilled persons with theoretical intelligence just as it needs experts with practical intelligence. The more options it offers, the more readily able young persons and their parents will consider dual training. Consequently, in the case of such young persons, concepts must be elaborated which go beyond the usual minimum requirements. Such concepts are basically aimed at the deepening and broadening of content, and at material of a more demanding nature which is not normally part of the "standard repertoire" — in supplementary qualifying courses.

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PROBLEM GROUPS IN VOCATIONAL TRAINING

In collaboration with the chambers and other agencies reponsible for vocational training, several thousand young persons are selected yearly to take part in the programme for the promotion of talented persons in vocational training. The achievements attained in previous vocational training are rewarded with the award of scholarships for a variety of purposes.

Less able young persons

Despite manifold measures and programmes for the promotion of disadvantaged young persons, and a favourable availability of training places for those seeking them, there are a large number of young persons who have not successfully completed an apprenticeship. Research puts their number at 10 to 14% of an age group. It is for this reason that efforts are being made by means of supporting measures to put persons with learning problems or those who are socially underprivileged in a position to formally complete a course of trade training and obtain permanent employment at a later date.

The vocational preparatory year

About 75% of young persons, who complete compulsory education without the standard *Hauptschulabschluß* (main school final certificate), either do not embark on vocational training at all or come to grief later. As a result, one of the most extensive measures designed to improve the basic starting conditions for these young persons vis-a-vis their occupational training is the so-called vocational preparation year (*Berufsvorbereitungsjahr/BVJ*). This usually takes place in a vocational school for the duration of one year.

In the first six months, young persons are briefly familiarized with various vocational fields such as metal, electricity and wood. In the second half of the year, the young persons concentrate on a vocational sector in which they intend to take a training course or seek a job. Whilst enjoying this highly practice-oriented instruction, the young persons are also given the opportunity of making good reading, writing, and arithmetic deficits. The BVJ does not encroach on other trade training; on the contrary, it is of a preparatory nature and improves the basic requirements for a successful apprenticeship.

Those who, despite these supportive measures, experience problems on the apprenticeship market, follow up their BVJ with a full course of school training, e.g. a vocational foundation training year (BGJ) or a course at a *Berufsfachschule/BFS* (see above) – to the exclusion of on-the-job training, i.e. *betriebliche Ausbildung*. Only a small percentage enter gainful employment.

The "basic training courses" run by the Federal Employment Office are similar in objective. They are financed by the job centres, organized by independent providing bodies and carried out in workshops. In some cases, measures of this nature are the direct responsibility of the economy. Because of the varying deficits on the part of the young persons, there is a wealth of diverse courses which prepare young persons for limited activity. The problems of transition to the dual trade system are similar to those of the BVJ.

The programme for disadavantaged persons

Despite intensive efforts, many young persons, particularly those without a final main school certificate, ex-special school pupils, following vocational preparatory measures, and foreigners do not find sufficient training places, especially in structurally weak areas. Consequently, in the 1980s, the Federal Ministry of Education and Science devised a special programme to help this particular group of persons. Training places are provided initially at external instructional centres instead of in firms. Here the young persons enjoy social-educational care, too. In addition, they attend vocational school like normal apprentices.

Training at out-plant centres is intended to last only as long as there is no place available in a firm. The latter then continues the training. It concludes with the usual examination conducted by the chamber. Diverse, similar programmes are run by the *Bundesländer* and numerous local authorities. These specific forms

Wherever possible, handicapped persons are to receive normal training in a recognized apprenticeable trade

of training are designed to

- make demands based on performance,
- correspond to the learning habits of young persons with limited performance and to boost their motivation,
- be open to further continuation training segments and final trade qualifications,
- enhance employment prospects.

The importance of this programme is shown by the fact that the number of assisted young persons is growing year by year. Purposeful measures for this group of persons play an important role at European Union level. The latter has launched an extensive promotion programme embracing the following: NOW (target group: young women), HORIZON (target group: handicapped and disadvantaged persons) and YOUTH START (target group: young persons without a qualification).

Vocational training for the handicapped

Basically, the same principle applies to handicapped persons. Wherever possible, they are to receive normal training in recognized skilled trades. In addition, the handicap or disablement in question can be taken into consideration in the final examination.

In accordance with the Vocational Training Law (*Berufsbildungsgesetz*), special training courses are possible for persons who are severely handicapped – physically, mentally, or psychologically. Within the framework of such courses, various groups undergo training in firms whilst other young persons are trained at *Berufsbildungswerke* (special facilities financed by job centres). At the latter, young persons are given special assistance by training adapted to their particular handicap and concomitant care provided by doctors, psychologists, special education experts, and other persons skilled in rehabilitation, to help them complete their course successfully. Statistics show that 90% of the persons assisted in this way are able to work in their new trade thereafter.

The teaching of training content takes place by means of special teaching and learning methods which have been adapted to the requirements of the various handicapped groups. Within the framework of existing regulations, the manner and degree of the particular disablement are taken into account in training and for examination purposes.

Vocational training of young foreigners

Foreign youngsters constitute a particular problem as far as vocational training is concerned in the Federal Republic of Germany. There are almost 7 million aliens living in Germany at the present time. About half of them come from Turkey. Although some 300,000 young foreigners between the ages of 15 and 18 are obliged by law to attend vocational school, only about 40% of them decide to undergo trade training. True, their percentage has grown in recent years, but is still too small. By way of a comparison, almost 70% of all young German persons of the same age group follow a training course. The situation is particularly bad as far as young foreign women are concerned.

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The main reason for this is the lack or inadequate knowledge of the German language. This, in turn, stems from the fact that only a very small number of foreign youngsters in the Federal Republic of Germany have attended school full-time or at least partially. As a result, of course, they do not have a final school certificate.

Most of the young foreigners undergoing normal trade training today have, for the most part, been to a German school for a number of years. They speak good German, have a good final certificate in most cases and are offered the same vocational opportunities as comparable young Germans of the same age.

The Federal Government, *Bundesländer* and local authorities, the top organizations of industry and commerce, the trade unions and the Churches are making diverse efforts to improve the training situation of young aliens. The promotion programmes decided on by the Federal Government and the European Union focus on the improvement of educational opportunities. These programmes embrace the preschool, school, the vocational training sectors as well as advice and information. Many foreign parents and young persons are still not aware of the importance of a successfully completed course of trade training, particularly in a country like Germany which lays great store by formal certificates, nor are they in the picture regarding the manifold educational/training opportunities available.

Efforts are being currently focused on measures aimed at vocational training, the teaching of German, the overcoming of deficits in general education and vocational school instruction – and assistance concomitant with training.

Attempts have been made for years to open up industrial-technical trades to a greater extent for women.

The promotion of women in vocational training

The increased involvement of women in vocational training for former "men's jobs" has not been able to effect any major change in the gender-related, different choice of career. This has a disadvantageous result: young women are strongly oriented towards jobs which can only be learnt in vocational schools. For the most part, these do not have the "market value" of the trades preferred by males. This restricts later opportunities of employment and advancement. The favourite school-trained careers are household management, business specialist, medical care and social work.

A third of all female trainees have decided on a career as retail-trade saleswomen, doctor's assistant, dentist's assistant, hairdresser or clerical worker. By way of a comparison, less than a quarter of young men concentrate on the five trades most favoured by them.

It is for this reason that efforts have been made for years to open up the trade/technical trades to a much greater degree for women. The problems in this context are to be found on both sides, i.e. employers and young females.

Young foreigners are the "problem child" in the German education system. Of the 300,000 young aliens of compulsory vocational school age, only about 40% decide to undergo training. Too few in comparison with the almost 70% of young Germans embarking on an apprenticeship

▶ Firms are hesitant about making vocational areas also available to women which have so far been an exclusively male preserve, fearing that women will not be equal to the tasks, and because they are unsure about the effect this training will have on the working climate. Employment at a later date is also not without its problems. There are protective laws regarding the employment of women. Moreover, many young women leave working life, if only temporarily, when they want to start a family. This confronts many a firm with the question as to whether trade training for women is worthwhile.

▶ Most young females are unfamiliar with industrial and technical jobs. Environment and school do little to encourage their interest in things technical. Often family and acquaintances adopt a negative attitude to "untypical" choices of career. The conventional ideas on the roles of men and women oppose such careers.

▶ One of the chief problems for many young women undergoing training is pregnancy or reconciling training with commitments as a mother. 40% of those discontinuing training give these problems as the reason. Since the solving of these problems in "male dominated" professions is particularly difficult, this situation is an additional reason for young women not taking up their desired career.

Admittedly, a number of pilot schemes by the Federal Government and the *Länder*, in which particular effort is being made to involve women to a much greater extent in metal and electrical trades, have resulted in a perceptible improvement in various attractive, technically-oriented occupational training courses. Nevertheless, if one compares the increase in the number of women in "male" occupations from 2% in 1977 to 9.1% in 1990, it is obvious that there is still much to be done in this sector. The European Community also regards the promotion of occupational training for young women as a priority measure for their promotional programmes (NOW, YOUTHSTART and IRIS network).

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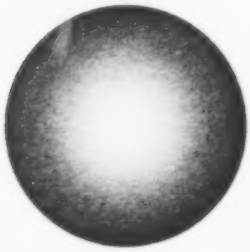
VOCATIONAL FURTHER TRAINING – AN OVERVIEW

The considerable technological changes in the economy are also making it necessary to engage in a process of "lifelong learning" to avoid trailing behind professionally. Further education means the continuation or resumption of organized learning on conclusion of the initial training phase or after embarking on a career. It embraces vocational further training and vocational retraining. The purpose of further training is to enable people to preserve and extend their vocational knowledge and skills, to adapt to technical development or to achieve professional promotion. Vocational retraining is designed to facilitate the transfer to another occupation. So far, state-financed vocational further training has been chiefly concentrated on off-the-job programmes.

Unlike initial trade training, there are relatively few statutory further training regulations. In fact, viewed overall, there are fewer stipulations in the statutory organization of vocational further training since it is felt that such training must enjoy flexibility rather than be subjected to formal regulations. The growing interlinking of training and further training in operational concepts has also led of late to greater activity on the part of the state with regard to regulations.



Vocational further training organizations

Vocational further training programmes are offered by a variety of organizations and institutions. Those mainly responsible for about half of these programmes are firms. They are followed by the adult education institutions (*Volkshochschulen*) which continue to be the provider of publicly sponsored further training for various groups of persons. In addition, a wide range of programmes is offered by the professional associations, the chambers, the trade unions, the Churches, and many other institutions. In view of the rapidly changing requirements at one's place of work, further training motivation on the part of employees is decidely high. This is particularly true of the new *Bundesländer* where, because of the fundamental structural changes taking place, there is particularly great demand for supplementary qualifications or retraining.

The legal basis of vocational further training

The Federal Government and the *Bundesländer* enjoy legislative powers for certain areas of further training. The Federal Government is legally responsible for on-the-job vocational further training whilst the powers of the *Länder* relate, first and foremost, to vocational further training in schools, non-vocational further training and higher education.

The main legal foundations for the vocational further training system are provided by the Vocational Training Law, and the Employment Promotion Act for the public financing of individual measures.

The Vocational Training Law contains two types of régulations for vocational further training:

- the "*Kammerregelungen*", i.e. chamber regulations. Here, the responsible offices (chambers) can lay down content, aim, requirements, procedure and admission conditions for further training examinations in line with regional demand;
- the standard regulations nationwide. They embrace content, aim, examination regulations and designation of final certificate.

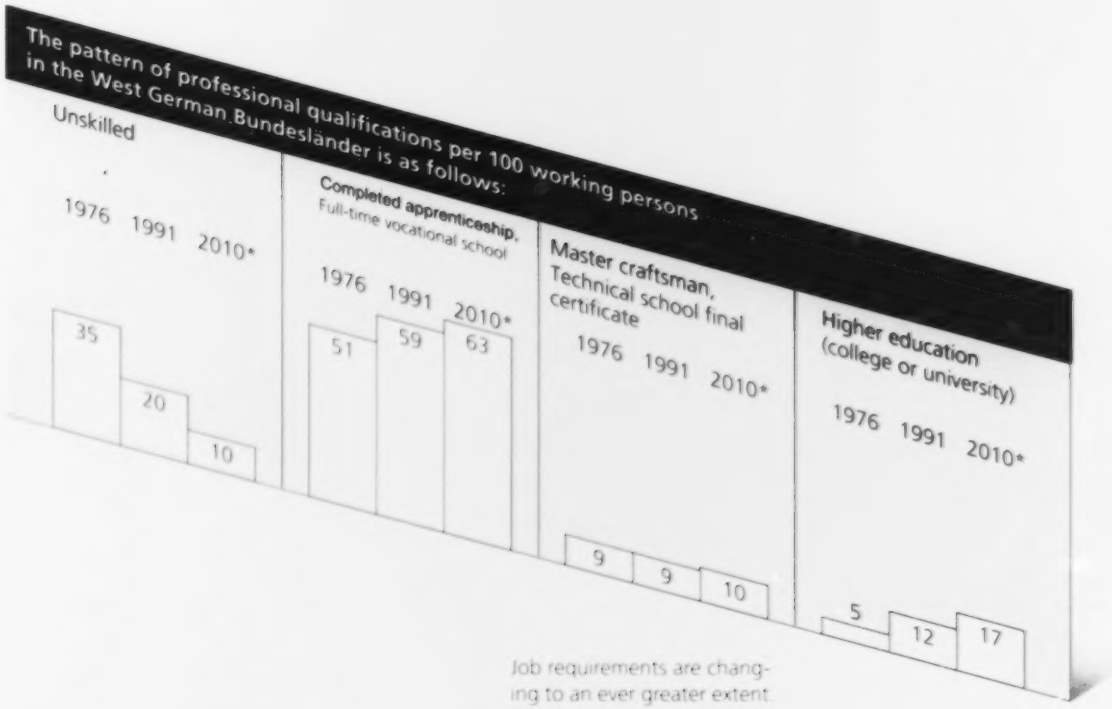
Today, the "*Kammerregelungen*" in the vocational further training sector embrace more than 200 different apprenticeship trades, especially in the chambers of industry and commerce sector. Here, in 1993, almost 80,000 further training examinations were held on the basis of the chambers' regulations or federal further training regulations. About two-thirds of these were in the commercial sector.

The most important federal-wide regulations for further training concern those affecting industrial foremen and master craftsmen *(Industriemeister* and *Handwerksmeister)*. Whereas the regulations for handicraft master craftsmen boast of a long tradition, those of their industrial counterparts are relatively new. They cover a total of 20 specialization fields and thus the major part of industry.

The most important federal statutory basis for the state financing of vocational further training measures is the Employment Promotion Act (AFG). It makes a distinction between individual and institutional assistance. Under certain given conditions, (personal qualifications of the participant, recognized training measure, labour-market requirement), the AFG acknowledges the legal entitlement to financial assistance. In addition, certain costs in connection with the training project are reimbursed.

In 1994, 600,000 persons took part in vocational further training, retraining and job-familiarization with AFG financial assistance.

The aims and importance of vocational further training with AFG financial assistance have changed quite markedly in recent years. During the years of economic growth and shortage of manpower in the 1970s, vocational further training served the purpose of promoting employees mobility, powers of adaption and individual professional promotion. With the growth of unemployment in the 1980s, these aims gave way to efforts to reduce unemployment and to promote the reintegration of jobless persons. At the moment, the vocational integration of ethnic German immigrants and assistance for persons without a trade qualification enjoy pride of place, whilst in Eastern Germany the acquisition of qualifications, e.g. in the commercial sector, are in great demand – qualifications which played a subordinate role in a state-controlled economy.



Job requirements are changing to an ever greater extent. The consequence: good and thorough vocational training will become increasingly important in the years ahead. This is revealed by a survey undertaken by the Institute of Labour Market and Vocation Research in Nuremberg. By the year 2010, for instance, the proportion of gainfully-employed persons with a degree in their pockets will have grown to 17%. In the mid-1970s, only every twentieth person (5%) had a university or polytechnic qualification. By the year 2010, a successfully concluded apprenticeship or full-time vocational school certificate will be demanded for up to almost two-thirds of all jobs. Only every tenth person will still be able to earn a livelihood as an unskilled worker performing simple tasks.

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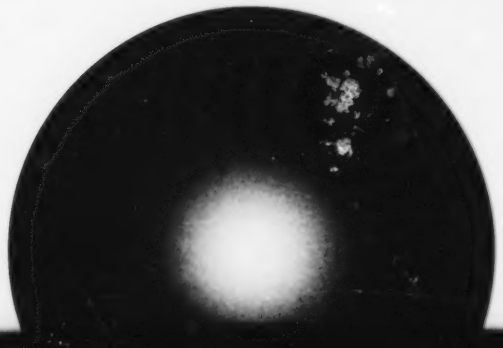

FURTHER DEVELOPMENT OF VOCATIONAL TRAINING

Further development of the dual system of occupational training is influenced by many factors, e.g. manpower requirements and demographic developments, the qualifications demanded at one's place of work, the European unification process, the attractiveness of a skilled-worker career and the opportunities of advancement in line with performance.

The demands in the skilled-worker sector

The marked shift of economic and employment structures towards the service industry – accompanied by a decline in the employment level in those sectors closely linked with production – will persist and further accelerate in the conditions resulting from the European domestic market. Even so, it is anticipated that more than 60% of all gainfully-employed persons will be working in production-oriented areas in the widest sense and in the primary service sector in the next two decades. The call for ever better qualifications are increasingly ousting semi- and unskilled personnel from these "classical" skilled-worker employment areas.

In the industrial, i.e. production sector, for instance, the proportion of work devoted to manufacture and repair will decrease. The installation and maintenance of highly complicated machinery will increase. Work of this nature calls for qualified personnel who are also actively engaged in further training. The knowledge gained through practical experience of machinery, process and product must be combined with technical-theoretical qualifications and general key qualifications.

In the commercial-administrative sector, routine and specialist work will decrease because of the increasing use of integrating information and communications techniques. Spheres of activity, in which independence, coordination, organization and leadership skills – i.e. key qualifications – combine with the professional competence and skilled handling of information technology, will extend. It is for this reason that here, too, the demand for skilled workers is growing. On the basis of their vocational training, they must continually adapt and extend their qualifications through vocational further training.

This trend towards the demand for higher qualifications is being enhanced by the changes in the organization of work linked with the developments described above. The keywords are: flat hierarchies, decentralization of decisions, group and teamwork, enrichment and expansion of individual spheres of work.

As a result of the open-frontier single market in Western Europe, which came into being in 1993 and which is gradually including East European countries, too, and thus the vocational freedom of movement, the knowledge of foreign languages is coming more and more to the fore. As one of the member states with a highly developed vocational training system, it is particularly incumbent on the Federal Republic of Germany to participate in concepts for cross-border cooperation in occupational training and further training. According to the latest surveys, 78% of all firms are already demanding a knowledge of English from their employees nowadays. The fact that 24% of vocational school pupils are currently being taught foreign languages shows that there is a need for action – a need which can only be partially met during initial vocational training, however. Knowledge of foreign languages has already acquired great importance in the vocational further training process.

Promising professional careers

The reason for staying on longer at a secondary school and acquiring a university entrance qualification stems from the realization – or at least the assumption – that such qualifications offer many options via further education, and the prospect of a promising professional career. This attitude is not only causing a "dry-out" of the main school (*Hauptschulen*) – which was traditionally the path to the dual training system. It is also making the main school – vis-a-vis competitive scholastic courses which can only lead to university entrance via a roundabout route – less attractive in the eyes of many young persons and their parents. This is resulting in a situation where young persons with an intermediate certificate (*Mittlerer Abschluß*) or the entitlement to study continue their school education or embark on a course of studies instead of starting work in their chosen trade on completion of their dual training.

Continued training enables professional knowledge and skills to be adapted to technical development

Exploitation of potential

The diverse educational efforts needed to enhance the attractiveness of a skilled-worker career are characterizing current discussions in Germany:

- ▶ Differentiated promotion of able and less able young persons, exhausting talent and individual inclinations, to do justice to ability and basic vocational requirements;
- ▶ Improvement of quality at vocational schools so that they adjust to changes in technology and society;
- ▶ Equity of general and vocational training courses and permeability of educational paths. This means that the successful completion of an officialy recognized occupation must provide the same access to opportunities of continued education as intermediate school certificates and the acquisition of a master craftsman's certificate admission to a higher education institution. In this way, dead-ends can be avoided and scientific innovation be available to operation practice;
- ▶ Information for young persons to enable them learn a practical trade.

Innovative qualification profiles

For the last 20 years, pilot schemes have turned out to be a highly effective instrument of innovation-promotion in vocational training. On the strength of an agreement between the Federal Government and the *Bundesländer*, they are discussed beforehand by a joint commission and then carried out as "vocational school pilot schemes" or "industrial/commercial pilot schemes" in individual educational institutions. This system provides the ability to react flexibly to rapid changes in technology and society without great administrative outlay and to test new developments directly in practice. Almost 600 scientifically monitored pilot schemes have been carried out or launched and have provided educational policy, research and planning with important impulses. The subject areas embrace the whole spectrum of training and further training, content and final certificates, cooperation of places of learning and special groups of persons. Two basic goal directions for the years ahead are beginning to emerge: first, it concerns the development of certifiable additional qualifications during and after training which open up professional prospects and access to further education. Second, it concerns the development of regularized training courses in innovative occupational fields which are of great importance to Germany as an industrial location.

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Important Adresses

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